

App. No. 10/607,581
Office Action Dated June 23, 2006

RECEIVED
CENTRAL FAX CENTER

OCT 20 2006

REMARKS

Reconsideration is respectfully requested in view of the above amendments and following remarks. Claims 11-12 and 14-15 are hereby amended. Claims 11-12 and 14-15 have been rewritten as method claims. The limitation in claim 11 concerning forming the multilayered film by roll molding or injection molding, and integrating the multilayered film with the resin case by insert molding is supported for example by previous claim 13 and page 11, line 26 to page 12, line 8. Claims 1-10 and 13 are canceled without prejudice or disclaimer. No new matter has been added. Claims 11-12 and 14-15 are pending.

Claim Rejections – 35 U.S.C. §102

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 09-259840 (Toyouchi). The rejection is rendered moot as claims 1-10 have been canceled. Applicants do not concede the correctness of the rejection

Claim rejections – 35 U.S.C. § 103

Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyouchi in view of JP 10-10106513 (Kurematsu). Applicants respectfully traverse the rejection.

Claim 11 is directed to a method for producing an alkaline storage battery. Claim 11 requires forming the multilayered film by roll molding or injection molding, and then integrating the multilayered film with the resin case by insert molding. By employing roll molding or injection molding in order to form the multilayered film, the adhesion between the multilayered films can be enhanced. On the other hand, if the multilayered film is not formed by roll molding or injection molding, then an adhesive must be used to maintain adhesion between the layers. However, the use of an adhesive at operating temperatures of the battery (40° C to 50° C) would

App. No. 10/607,581
Office Action Dated June 23, 2006

lead to the decomposition of the adhesive, thereby lowering the adhesion between layers of the multilayered film.

Toyouchi discloses a battery case having a polymer alloy and a resin coating. However, Toyouchi fails to teach or suggest the use of a metal layer in the multilayered structure, as required by claim 11. Kurematsu does not remedy the deficiency of Toyouchi. In particular, Kurematsu discloses a metal plate that must be completely covered with the resin, and in no way teaches or suggests a multilayered film formed by injection molding, which is then integrated with the resin case by insert molding, as required by claim 11.

As indicated in Table 2 of the present specification, providing a multilayered film with a surface layer made of a resin and a metal layer disposed between the surface layer and the resin case allows almost twice as much discharge reserve as compared to when no multilayered film is employed (see page 12). Further, by providing a multilayered film by roll molding or injection molding, adhesion between layers of the multilayered film can be improved. Moreover, the use of an adhesive can be avoided, thereby avoiding loss of adhesion between the layers during operation due to decomposition of the adhesive. Neither Toyouchi nor Kurematsu teach or suggest such advantages enjoyed by providing a multilayered film as required by claim 11. Therefore, claim 11 and the dependent claims therefrom are patentable over Toyouchi and Kurematsu, taken alone or together.

Favorable reconsideration and withdrawal of the objection are respectfully requested.

Double Patenting

Claims 1-15 are provisionally rejected for obvious-type double patenting over claims 1, 2 and 4-7 of co-pending Application No. 10/798,149. Applicants respectfully traverse the rejection.

App. No. 10/607,581
Office Action Dated June 23, 2006

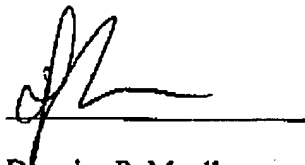
Claims 1, 2 and 4-7 of Application No. 10/798,149 do not recite the method of forming the multilayered film by roll molding or injection molding, and integrating the multilayered film with the resin case by insert molding, wherein the multilayered film includes a surface layer made of a resin and a metal layer disposed between the surface layer and the resin case.

Favorable reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions or concerns regarding this communication can be directed to the attorney-of-record, Douglas P. Mueller, Reg. No. 30,300, at (612) 455.3804.

Respectfully Submitted,

Dated: October 20, 2006



Douglas P. Mueller
Reg. No.: 30,300
Hamre, Schumann, Mueller & Larson, P.C.
225 South Sixth Street
Suite 2650
Minneapolis, MN 55402
612.455.3800